

# **SCDRB Annual Report**

THE FOLLOWING IS A  
**PRELIMINARY**  
ANNUAL REPORT FOR THE  
STATE CHILD DEATH  
REVIEW BOARD.

DUE TO DATA  
PROCESSING ERRORS,  
THE ACTUAL CASE COUNT AND  
CHARTS ARE UNAVAILABLE.  
AS SOON AS THEY ARE  
AVAILABLE, THE REPORT  
WILL BE UPDATED.

# SCDRB Annual Report

## State Child Death Review Board of Kansas



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The costs of this publication were assisted through a grant provided by  
the Federal Children's Justice Act.

# KS Attorney General Phill Kline



September 2006

Dear Fellow Kansan:

The State Child Death Review Board was established by the Kansas Legislature in 1992 to help us learn more about child mortality. When a child dies, everyone in a community is affected. That is why the state of Kansas has been fortunate to have a dedicated, all-volunteer board of professionals to review child fatalities. With the information collected annually by the board, we can learn more through studying trends in child deaths and use what we learn to formulate strategies to help reduce the occurrence of further child deaths.

This year's report comprehensively addresses data from the year 2004 and highlights many of the Board's findings for the eleven-year period from 1994 to 2004. The board presents its recommendations and addresses many of the most important issues facing child health and safety.

By reviewing this year's report, I hope we can all learn more about ways to protect our state's most treasured asset, our children.

Sincerely,

A handwritten signature in black ink that reads "Phill Kline". The signature is written in a cursive, flowing style.

Phill Kline  
Kansas Attorney General

# Board Members

## **Attorney General appointee**

Kevin Graham, J.D., Chairperson  
Assistant Attorney General, Topeka

## **Director of Kansas Bureau of Investigation appointee**

David Klamm  
KBI Senior Special Agent, Wichita

## **Secretary of Social and Rehabilitation Services appointee**

Paula Ellis, MSW  
SRS Assistant Director of Child Welfare, Topeka

## **Secretary of Health and Environment appointee**

Lorne A. Phillips, Ph.D.  
State Registrar, Topeka

## **Commissioner of Education appointee**

Sarah Johnston, M.D.  
USD 490 Board of Education, El Dorado  
University of Kansas School of Medicine, Wichita

## **State Board of Healing Arts appointees**

Erik K. Mitchell, M.D. (Coroner member)  
District Coroner, Topeka

Jaime Oeberst, M.D. (Pathologist member)  
Deputy Coroner, Wichita

Katherine J. Melhorn, M.D. (Pediatrician member)  
Department of Pediatrics  
University of Kansas School of Medicine, Wichita

## **Attorney General appointee to represent advocacy groups**

Mary A. McDonald, J.D.  
Assistant City Attorney  
Wichita City Prosecutor's Office, Wichita

## **Kansas County and District Attorneys Association appointee**

Keith Schroeder, J.D.  
Reno County District Attorney, Hutchinson

## **Staff**

Angela Nordhus  
Executive Director

## **General Counsel**

Laura Graham  
Assistant Attorney General

# Acknowledgments

The review of each child's death in Kansas could not be accomplished without the invaluable commitment of many people across the state. The State Child Death Review Board (SCDRB) remains grateful for the significant contributions of the Office of Attorney General Phill Kline, county coroners, law enforcement agencies, the Department of Social and Rehabilitation Services (SRS), the Kansas Department of Health and Environment (KDHE), physicians, hospitals, child advocates, county and district attorneys, and all others who offer their assistance in supplying the information necessary for our review.

As a multi-disciplinary, multi-agency board we enjoy the support of our employers who allow us the time necessary to fulfill our responsibilities as board members.

Finally, the SCDRB would like to recognize and express its gratitude to the Department of Social and Rehabilitative Services for providing us with the Children's Justice Act Grant, which funds the board, as well as the publication of this report.

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# I. Executive Summary

The State Child Death Review Board (SCDRB) was created in 1992 as a multi-disciplinary, multi-agency panel to review child deaths in Kansas. The SCDRB has the statutory obligation to review the death of every child that is a Kansas resident or dies in the State of Kansas. This review process is not duplicated by any other state entity. The SCDRB has completed a review of the 2004 cases.

The 2004 data parallels previous years and the cumulative data (1994 to 2004) very closely. Although the number of deaths slightly decreased from the previous years, 2004 was consistent with trends noted since the SCDRB began reviewing deaths in 1994. In 2004, 492 Kansas children died.

The Board categorizes deaths in six categories: Natural-Except Sudden Infant Death Syndrome (SIDS); Unintentional Injury; Natural-SIDS; Homicide; Suicide; and Undetermined. As in the past, Natural death is the largest category, with children under one-year of age making up the majority of those deaths.

The next largest category is Unintentional Injury, of which over half were motor vehicle crash related. The most represented age group in motor vehicle deaths was 15-17 year-olds. As in every year since the inception of the SCDRB, the majority of children dying in motor vehicle accidents were not properly restrained or using appropriate safety restraints.

In 2004, there were \_\_\_\_ Undetermined deaths. This highlights the Board's recommendation to all entities involved in child deaths to perform thorough and complete death investigations. Often the Undetermined classification is the result of a lack of thorough, comprehensive investigations/autopsies, leaving the Board with inadequate information upon which to make a determination of cause or manner of death.

The main thrust of the Board's policy recommendations this year is on motor vehicle deaths. These deaths have some of the most easily implemented prevention policies. The Board strongly encourages the members of the State Legislature to consider the safety of their young constituents and implement a graduated drivers license law and a standard seatbelt law.

## II. 2004 Overview

The U.S. Census Bureau estimated the 2004 Kansas population to be 2,653,454, with 25% of those individuals under the age of 18. The SCDRB reviewed 492 deaths for calendar year 2004. This gives Kansas a rate of 75 child deaths per 100,000 children for 2004. Since the Board began its reviews, Natural and Unintentional Injury have been the two leading manners of death, and 2004 was no exception.

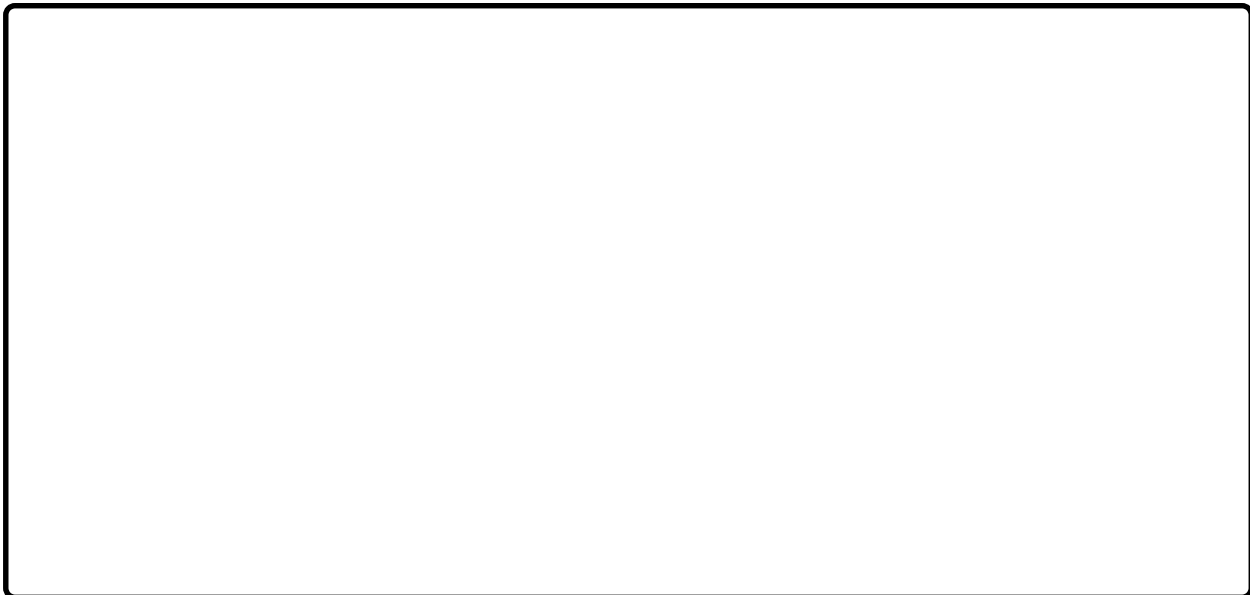
The Board classifies the manner of death into 6 categories:

- **Natural-Except Sudden Infant Death Syndrome (SIDS)** - death brought about by natural causes such as disease, congenital conditions and prematurity.
- **Unintentional Injury** - death caused by incidents such as motor vehicle crashes, drowning, or fire, which were not intentionally caused.
- **Natural-SIDS** - children who die prior to age one, and display no discoverable cause of death. Kansas statute requires that an investigation and an autopsy be performed before this classification can be applied.
- **Undetermined** - cases in which the manner of death could not be positively identified from the evidence collected.
- **Homicide** – death due to the intentional or unintentional injury or criminally negligent killing of another human being; including Child Abuse Homicide and Gang-Related Homicide.
- **Suicide** – death due to the intentional taking of one's own life.

Kansas has a demonstrable theme to its child deaths. The most telling point is that there have been no significant decreases in the number of fatalities. This consistency has troubling implications. Despite better and more complete information, associated prevention policies and strategies have not taken effect. Natural and SIDS deaths, the majority of which are babies one year and younger, generally rely on medical advances more than policy change for prevention. Methods of lowering death rates for Homicide and Suicide can be complex, with varying degrees of effectiveness. However, the second-largest category, Unintentional Injury, has some easily identifiable and simple prevention points. These will be addressed in the Board's recommendations at the end of the report.

The following graphs compare 2004 with the total numbers from 1994 (the first year reviewed by the Board) through 2004.

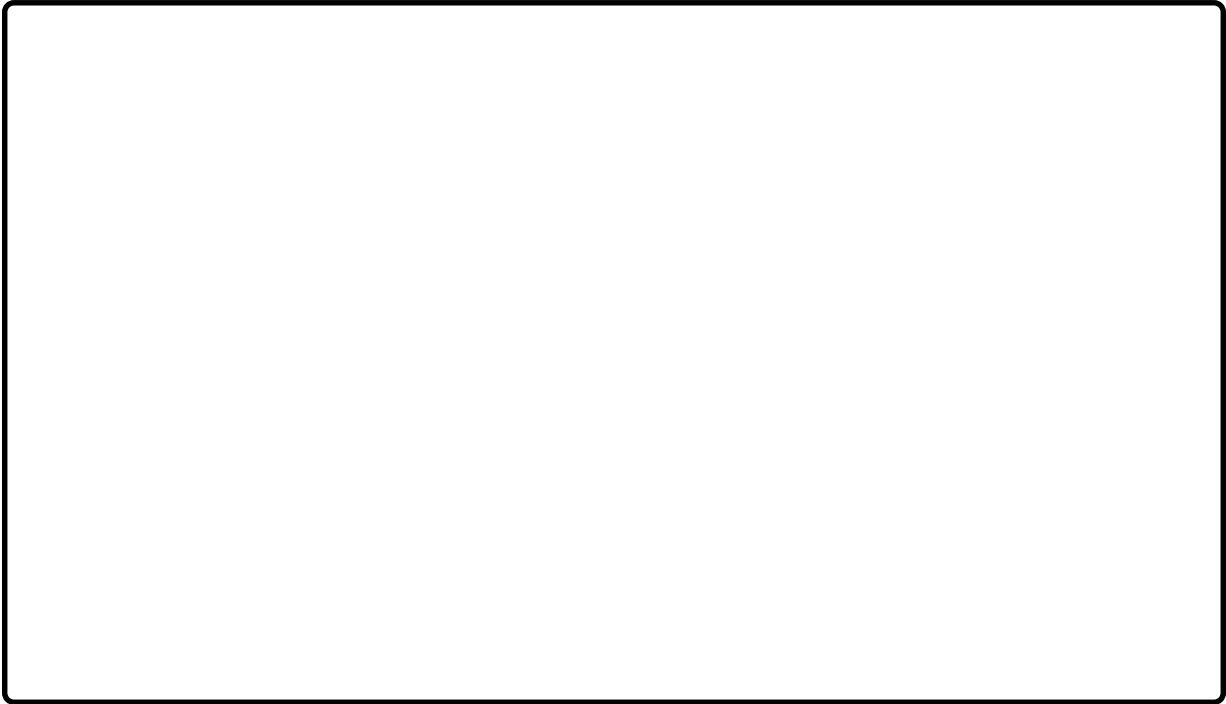
**Total Deaths in Kansas, 1994 to 2004, N = 5,468**





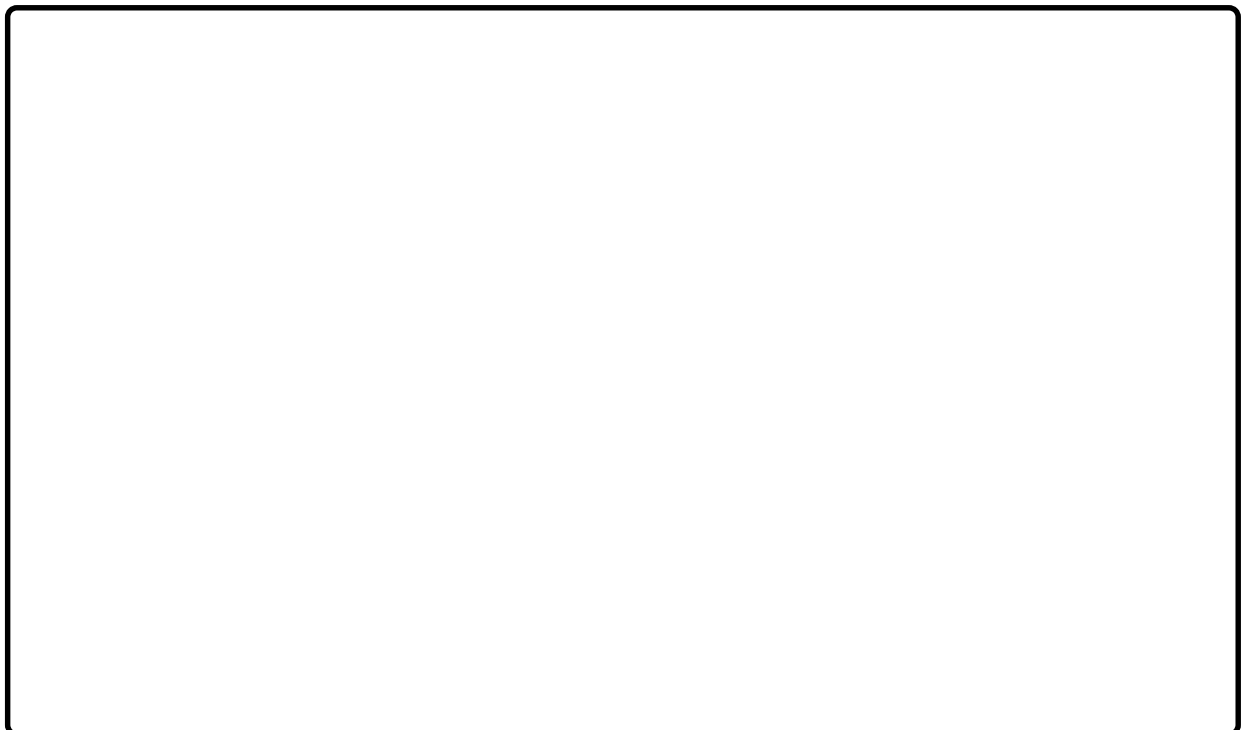
## II. 2004 Overview

Analysis by Manner of Death in 2004, N = 492



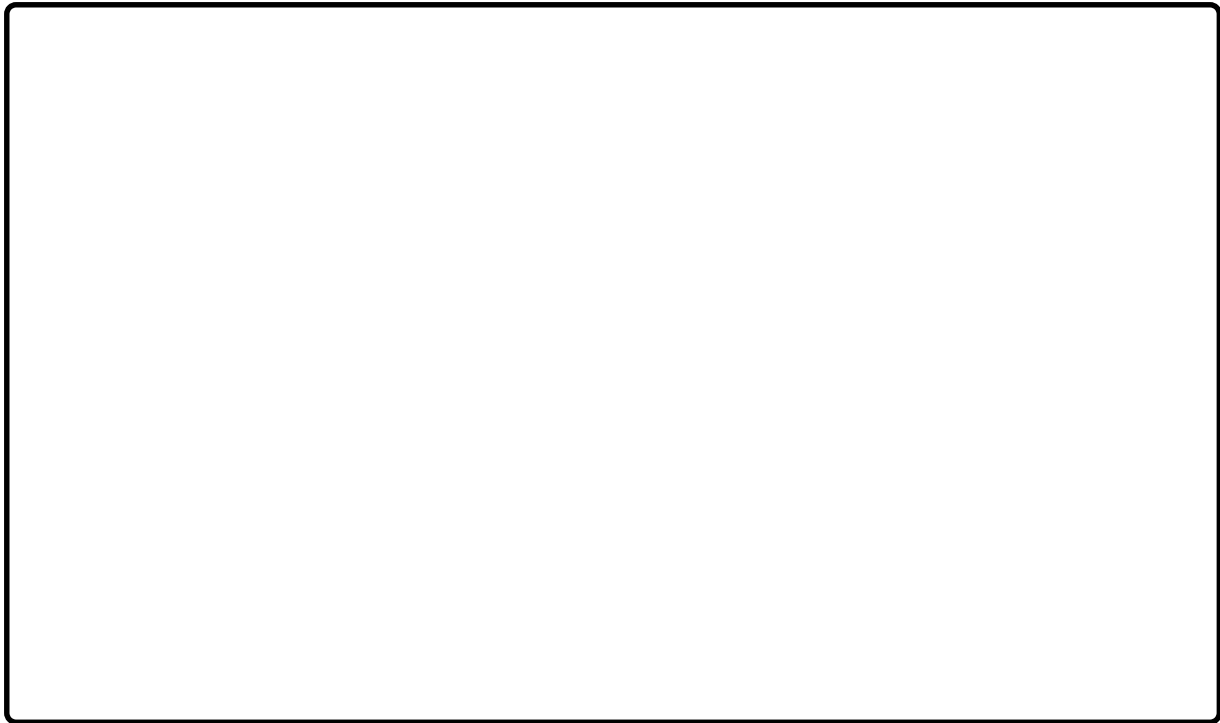
Note the similarity between 2004, and overall number of deaths from 1994 to 2004.

Analysis by Manner of Death, 1994 to 2004, N = 5,468



## II. 2004 Overview

Analysis by Age in 2004, N = 492



Again, the pattern of total deaths by age in 2004, follows the same general distribution of the cumulative data.

Analysis by Age, 1994 to 2004, N = 5,468



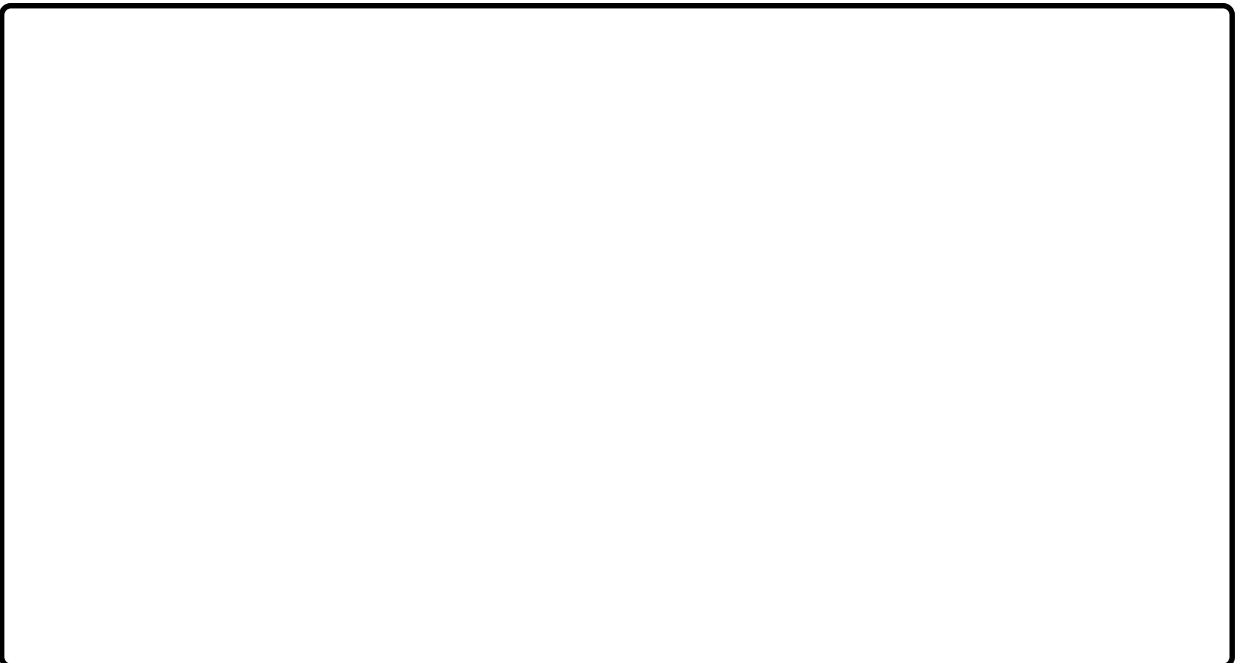
## II. 2004 Overview

According to the U.S. Census Bureau, there are approximately 1% more females living in Kansas than males. However, males dominate the representation in the total number of deaths. 2004 was no exception. Overall there were more male deaths than female deaths.

Analysis by Gender in 2004, N = 492



Analysis by Gender, 1994 to 2004, N = 5,468



# A. Violence-Related Deaths

Violence-related deaths include Homicide, Child Abuse Homicide, Gang-Related Homicide, and Suicide. They are a small, but consistent number of the total deaths, many of which are preventable. As the graphs indicate, 2004 saw a slight increase in Suicide deaths, while Homicide and Child Abuse Homicide deaths remained relatively equal.

Analysis by Type of Violent Death in 2004, N =



Analysis by Type of Violent Death, 1994 to 2004, N =



Analysis by Method of Violent Death in 2004, N =



# 1. Suicide

Suicide is a difficult issue, which is devastating and confusing to the family and community. In 2004, the Board reviewed 12 suicide cases. Nationally, suicide is the third leading cause of death for individuals ages 15 through 24. This form of death routinely takes the lives of 10 to 25 Kansas children every year. While it can be a painful process, thorough investigations of suicides are necessary to develop as much information as possible, in hopes of developing effective prevention strategies. Often the Board reviews suicide deaths and discovers the family has not been thoroughly interviewed, or autopsies have not been performed in a manner which would provide a complete evaluation of the youth's at the time of death. The desire of families and communities to put such tragedies behind them is understandable. Unfortunately, improper investigation and autopsy exams can hinder efforts to prevent further deaths of Kansas children.

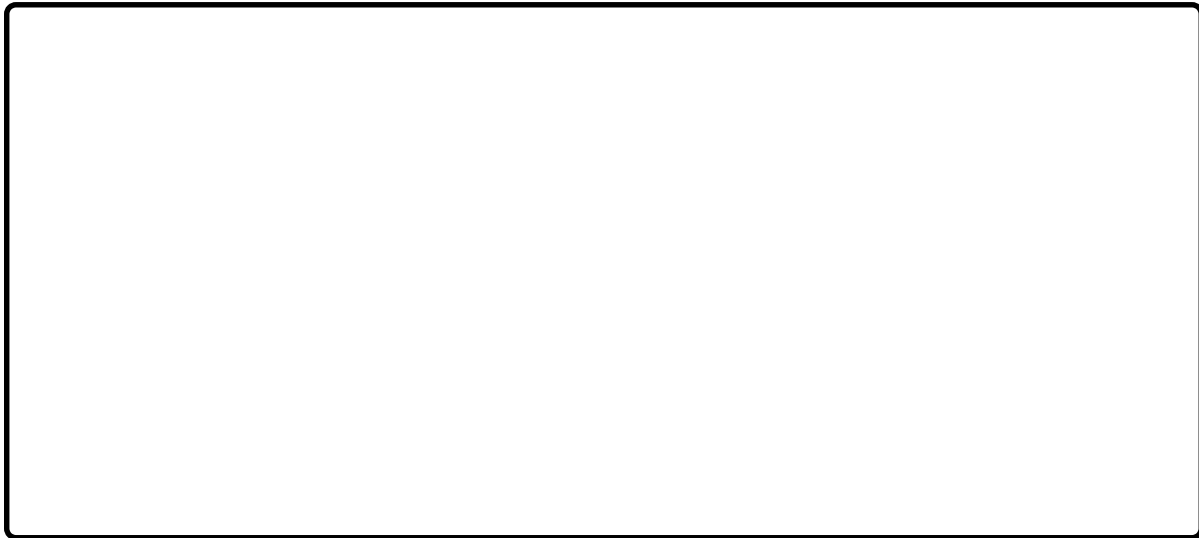
## Suicide Deaths by Method in 2004, N =

Despite the national trend showing that asphyxial suicide deaths are on the rise, Kansas continues to see weapons, specifically firearm use, in the majority of their suicide cases.

## Suicide Deaths by Method, 1994 to 2004, N =

# 1. Suicide

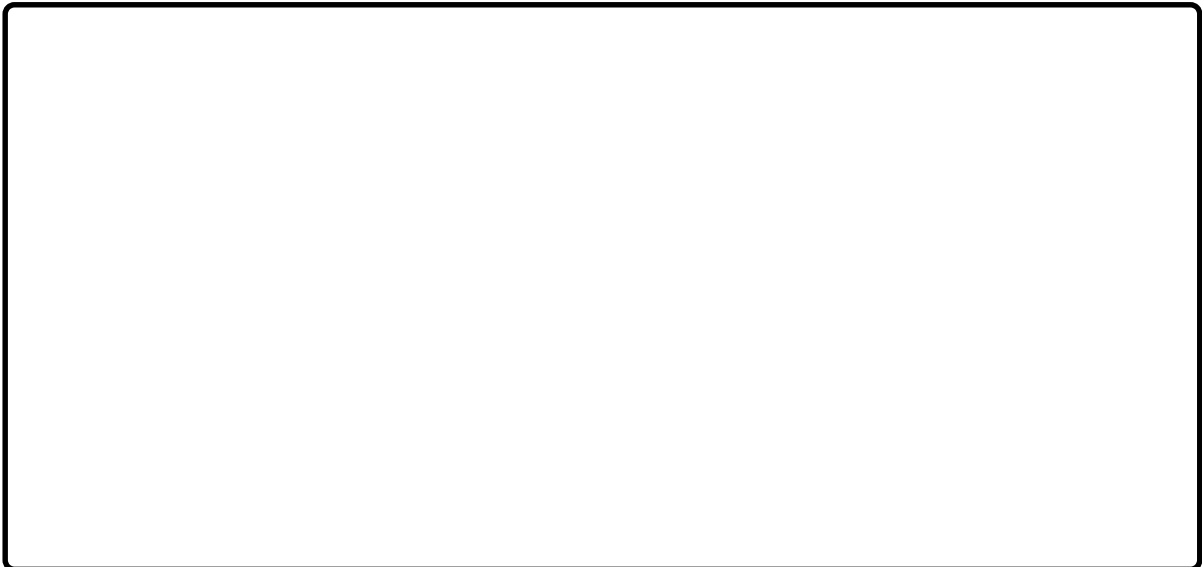
Suicide Deaths by Gender in 2004, N =



A 16-year-old who had a history of being physically abused, was diagnosed with depression, and displayed suicidal ideation before the event, hanged himself after an argument with his parents.

Typically the Board sees 15 to 17-year-old males committing the majority of suicide deaths. 2004 continued this trend. Males were represented in \_\_% of the suicide cases and the most represented age group was 16-year-olds.

Suicide Deaths by Age in 2004, N =

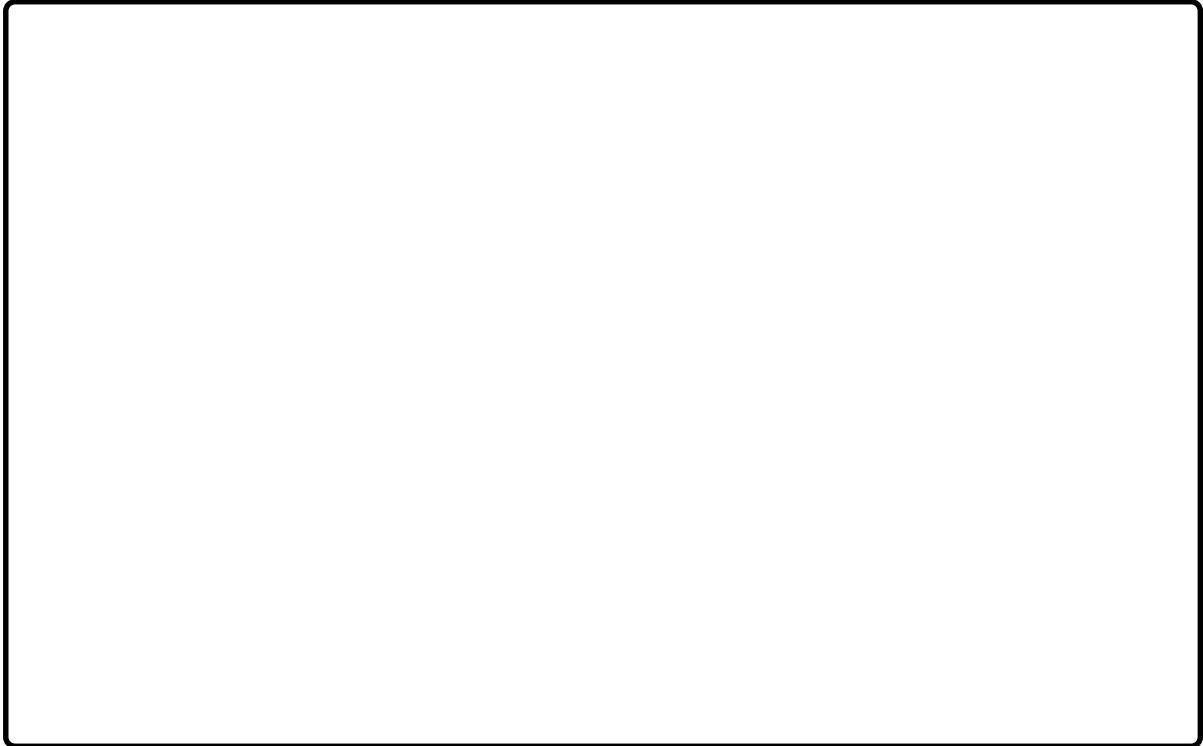


Distraught over a breakup, a 16-year-old, who had made suicidal threats, was not taken seriously and took his life with the use of a firearm obtained from a friend.

# 1. Suicide

In 2004, there was a slight increase in the number of suicide deaths from 2003; however, for the last three years, the number of suicides in children less than 18-years-of-age had changed very little.

**Total Suicide Deaths by Year, 1994 to 2004, N = 175**



## PREVENTION POINTS

- **Early diagnosis and treatment of mental conditions** - Early involvement of mental health professionals may prevent suicide attempts.
- **Evaluation of suicidal thinking** - Do not ignore statements about suicide, even if they seem casual or joking. The months following a suicide attempt or severe depression can be a time of increased risk, no matter how well the child seems to be doing. This is a critical time for family interaction.
- **Limit access to lethal agents** - Easily obtained or improperly secured firearms or medications are often used in suicides. The harder it is for a child to put their hands on these items, the more likely they are to rethink their intentions or allow time for someone to intervene.
- **Talk about the issue** - Bringing up suicide does not “give kids the idea”, but rather gives them the opportunity to discuss their thoughts and concerns. This communication can act as a significant deterrent.

## 2. Homicide

The Board reviewed \_\_ Homicides in 2004. Homicide is defined as the death of one person resulting from the intentional or unintentional actions of another person. **All \_\_ Homicides were considered preventable.**

A 17-year-old male lost his life during a struggle over a firearm with a 16-year-old male. The gun went off, striking the victim in the chest and killing him.

The improper handling of a firearm by an adult claimed the life of a 10-year-old female when she was shot in the head.

The Board defines Child Abuse Homicide as children killed as the result of abuse from caretakers (inflicting injury with malicious intent, usually as a form of discipline or punishment) or neglect (failing to provide shelter, safety, supervision, and nutritional needs). Board member Dr. Sarah Johnston identifies several child abuse risk factors and prevention points: “Maternal risk factors include young age, fewer than 12 years of education, late or no prenatal care, and being unmarried. Child risk factors include male gender and low birth weight. Household risk factors include prior substantiation of child abuse and neglect, substance abuse, low socioeconomic status, and presence in the household of an adult male not related to the child. The most effective methods for preventing child abuse involve programs which enhance parenting skills for at-risk parents. Examples of successful programs include home visits by nurses who provide coaching in parenting skills as well as quality early childhood programs which include parent training.”

A mother who “punished” her 4-year-old son was ultimately convicted of 1st degree murder, aggravated battery, and child abuse when the child died from blunt force injuries to his head, neck, trunk, and extremities.

**Homicide Deaths by Category in 2004, N =**





## 2. Homicide

In 2004, “Other” methods made up over half of the Homicides. These included vehicular homicide-----  
-----and blunt trauma injuries. Males made up the majority of Homicide related deaths in 2004.

**Homicide Deaths by Gender  
in 2004, N =**

**Homicide Deaths by Method  
in 2004, N =**

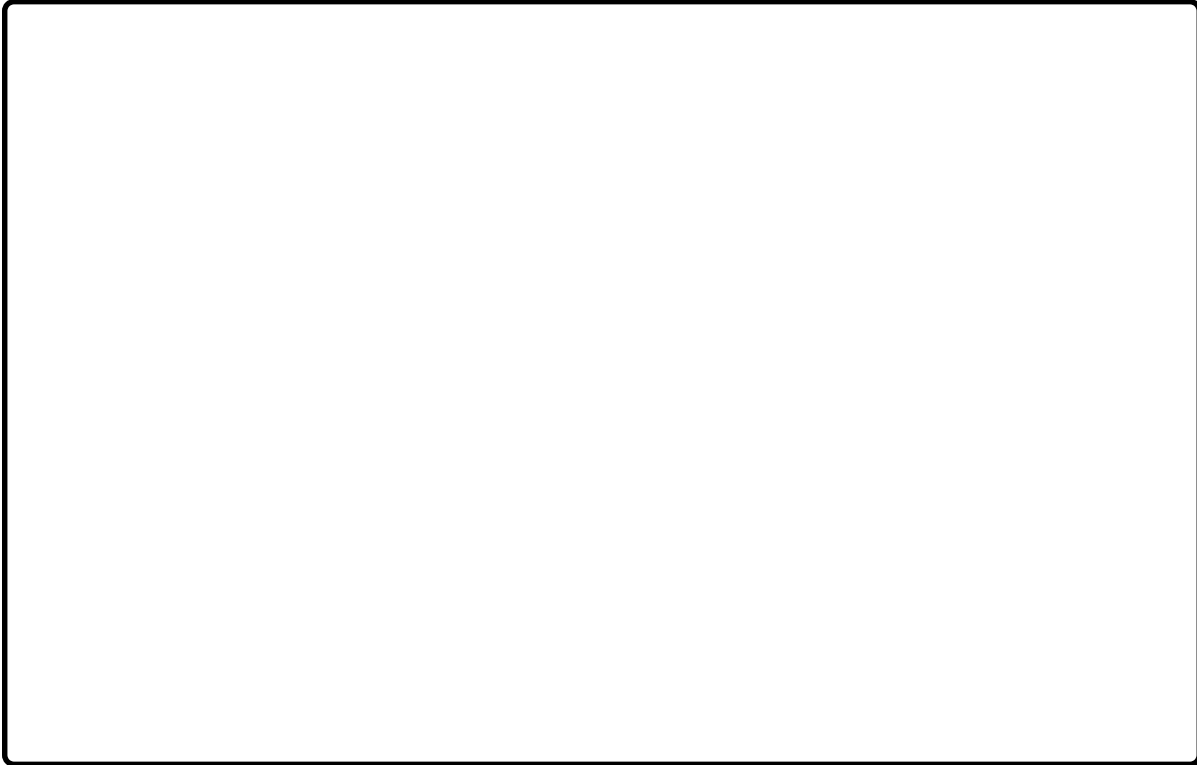
### PREVENTION POINTS

- **Family Violence** - Most homicides occur between family members, friends, and neighbors. Many of the incidents the Board encounters are not cold, calculated acts. More often, they are emotionally driven acts that could be avoided if restraint of uncontrolled emotions was exercised.
- **Take Extra Care with Young Children** - Young children are often the victims of child abuse homicide. Frustrated caregivers, often without any parental training, combine unrealistic expectations for children’s behavior with a lack of appreciation for their vulnerability. Abusive head trauma is an example of how an impact or violently shaking a baby can cause serious or fatal trauma to the child’s brain. Caregivers should be mindful of a child’s capabilities and susceptibility.

## B. Unintentional Injury

Unintentional Injury is consistently the second-largest category of death. These deaths are often the most preventable. In line with Kansas and national trends, motor vehicle crashes continue to make up a significant number of Unintentional Injury deaths. 15 to 17-year-olds were the largest age group affected.

Unintentional Deaths by Cause in 2004, N =



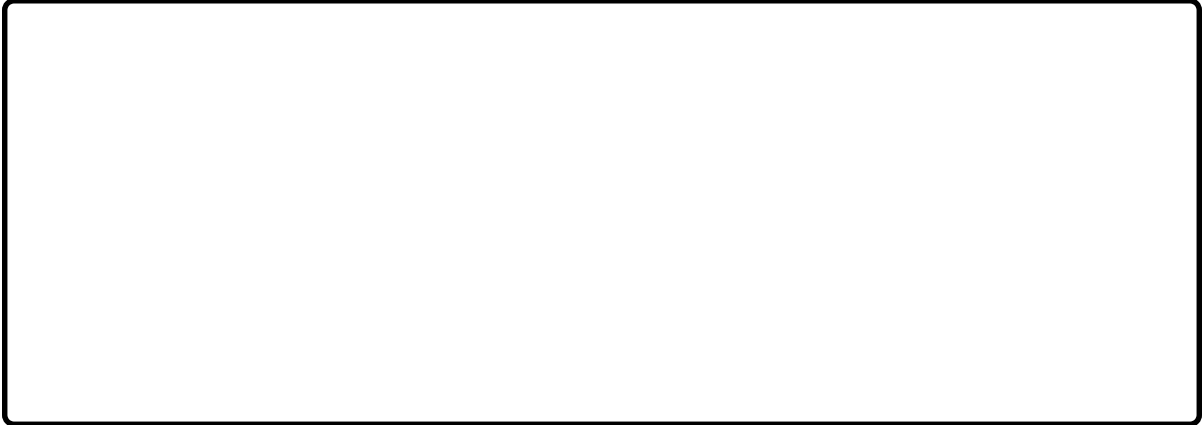
Unintentional Deaths by Age in 2004, N =



# 1. Motor Vehicle

According to the National Highway Traffic Safety Administration, motor vehicle crashes (MVC) are the leading cause of death for 15 to 20-year-olds. In 2004, 3,620 drivers in this age group died as a result of a MVC. Kansas lost \_\_\_\_ children in 2004 due to MVC's. Males make up the majority of those lost, with most of the deaths falling in the 15 to 17-year-old group. The Board would like to note that almost all of the motor vehicle deaths involved risk factors which were preventable. For example, \_\_\_\_% of the MVC's involved a driver or passenger who was not properly restrained.

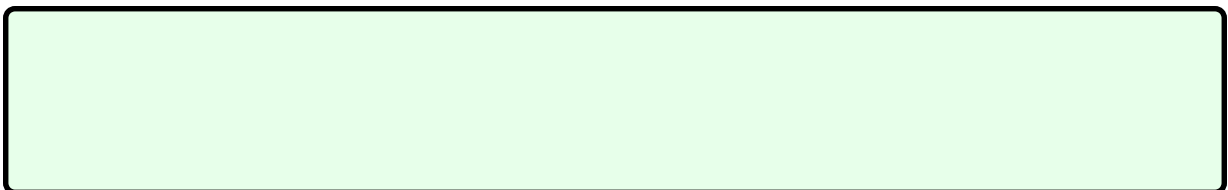
**MVC Deaths by Gender in 2004, N =**



**MVC Deaths by Gender, 1994 to 2004, N=**



Young teenagers account for the greatest number of motor vehicle deaths. They are often the driver or a passenger riding with other teen drivers. Currently, Kansas children may receive a learner's permit and begin driving at age 14. The SCDRB supports a graduated license law, which prohibits driving until age 16 and puts specific restrictions on the driver for the next two years. The following graphs emphasize the data leading to the recommendation described at the end of this report for implementation of a stronger Graduated Drivers License program.

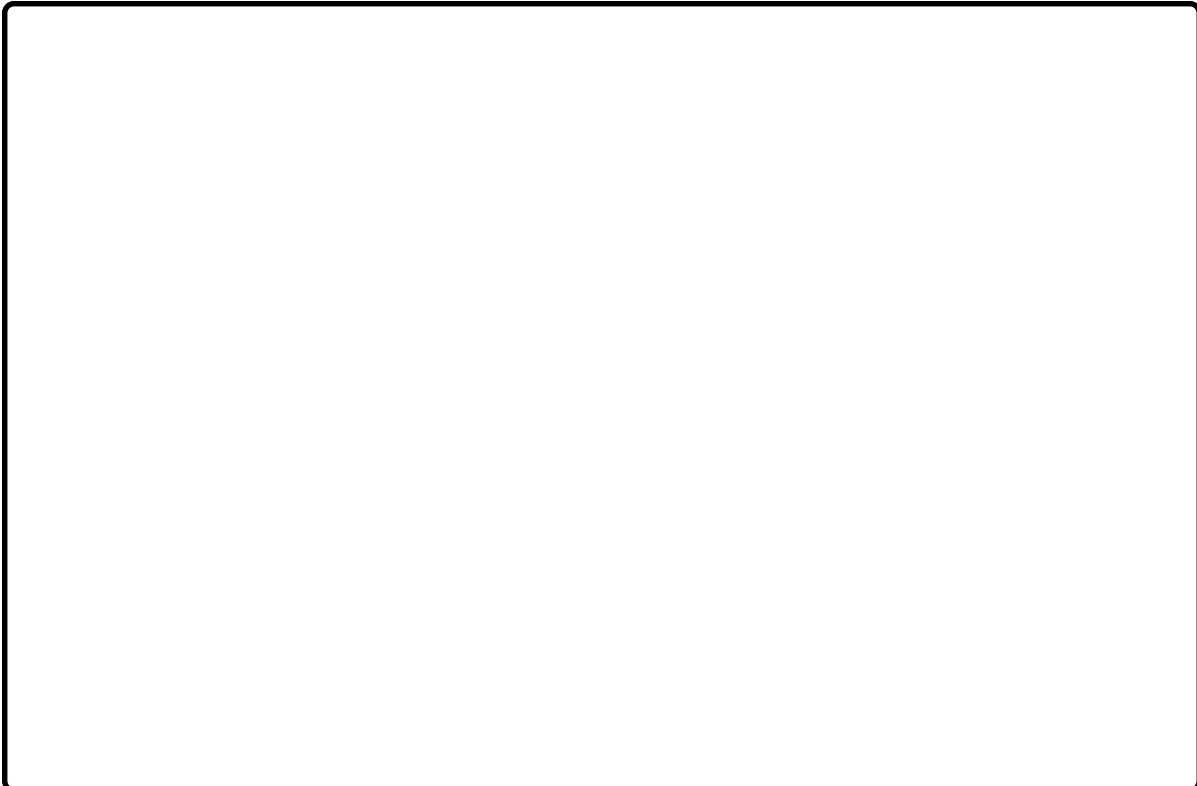


# 1. Motor Vehicle

MVC Deaths by Age in 2004, N =



Total MVC Deaths by Age, 1994 to 2004, N =



# 1. Motor Vehicle

All too often, the Board reads the words “unrestrained” and “ejected” before a description of fatal injuries. In \_\_ % of the \_\_ motor vehicle deaths, seatbelts or age appropriate restraints were not used at all.

Two children, ages 1 and 2, were traveling in an extended cab pickup. No child safety seats were used, nor were any seatbelts. The driver overcorrected the vehicle after dipping off the shoulder ultimately causing the truck to overturn. Both children, as well as one of the adults, were ejected from the pickup resulting in their demise.

The majority of children not using any form of restraint are ages 15-17. In 2004, \_\_ children in this age group were not using a restraint at the time of the crash. In the 10-14 year age group, \_\_ were unrestrained, and in the 9 and under age group, \_\_ were not restrained. This illustrates the need for Kansas to enact a standard seatbelt law for all passengers, in addition to more stringent enforcement and judicial adherence to the law.

A properly restrained 1-year-old and his mother had their lives spared when their vehicle crashed head-on with another vehicle. All occupants in the on-coming vehicle, including an infant, were unrestrained and died from their injuries.

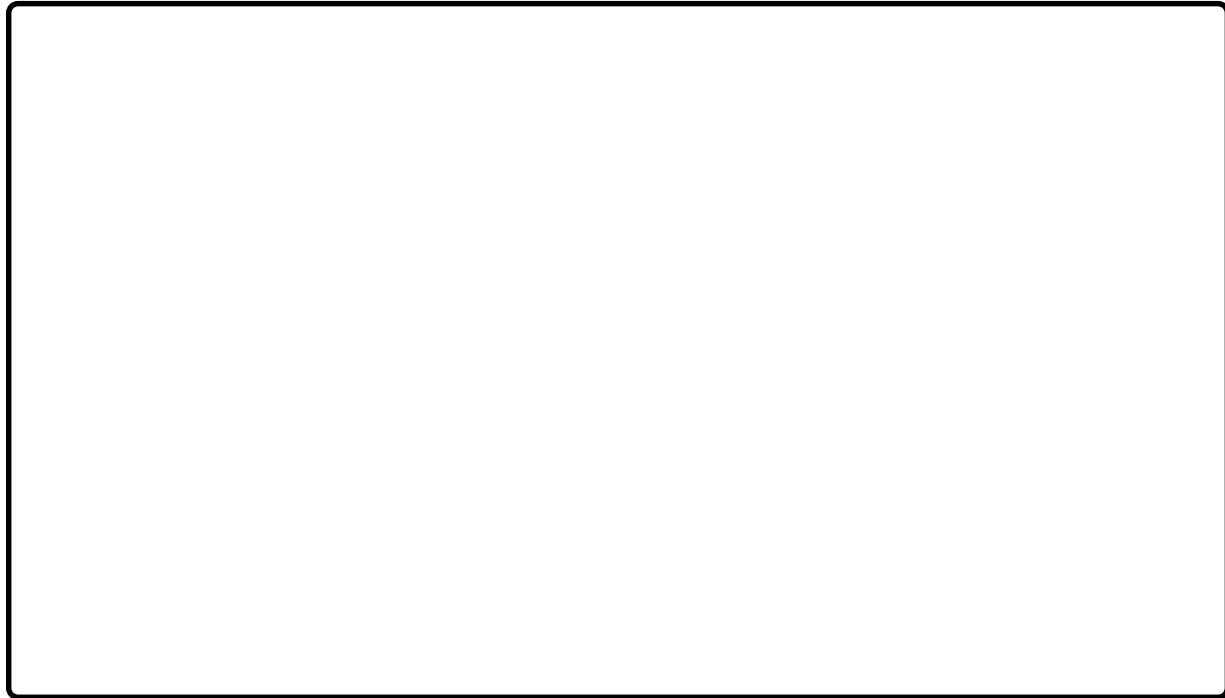
**MVC Deaths by  
Restraint Use  
in 2004, N =**

**Total MVC Deaths by  
Restraint Use,  
1994 to 2004, N =**

Despite the proven benefit of seatbelt use in preventing deaths, the percentage of Kansans who are unrestrained in fatal crashes remains high.

# 1. Motor Vehicle

Total MVC Deaths by Time of Crash, 1994 to 2004, N =752



Kansas law does not require a seatbelt to be used in the back seat of a vehicle if an individual is 14-years-of-age or older. In 2004, rear seat passengers were the second largest number of deaths.

A 16-year-old restrained driver was traveling at a very high rate of speed when she lost control of her vehicle. She, and the front seat passenger, who was also restrained, received only minor injuries, while the 17-year-old unrestrained backseat passenger was ejected from the vehicle and pronounced dead at the scene.

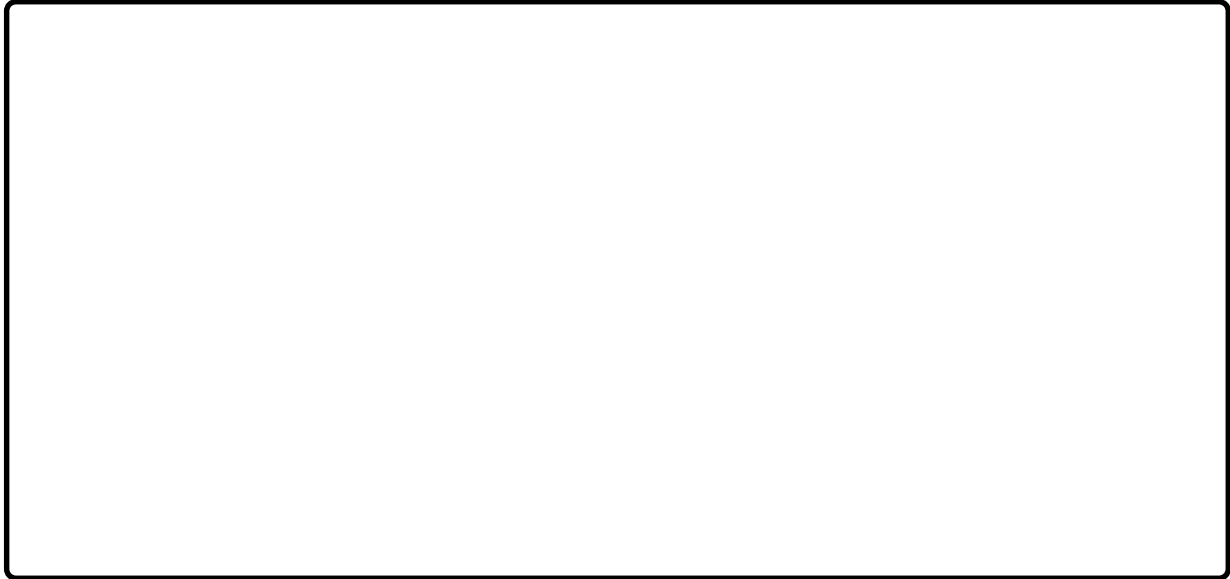
MVC Deaths by Seating Position in 2004, N = 72



# 1. Motor Vehicle

In addition to the lack of safety restraints, many MVC cases involve other preventable factors, the most prevalent of which is excessive speed.

MVC Deaths by Contributing Factor in 2004, N =



## PREVENTION POINTS

- **Use of proper safety restraints** - Wear seatbelts. Seatbelts and appropriate child safety restraints consistently prevent serious injury and death. According to the National Highway Traffic Safety Administration, parents who buckle up are more likely to use safety restraints for their children than those who do not. The importance of parental seatbelt use as an example is invaluable. Children under 4-years-of-age should be placed in child safety seats in the backseat. Children between the ages of 4 and 8 should be in belt-positioning booster seats.
- **Attentive driving** - Avoid distractions such as cell phones. Young drivers should have limits placed on the number of passengers, a known risk factor.
- **Avoiding alcohol or drug use** - It is never safe to drive after drinking alcohol or using narcotics or other mood-altering drugs. Avoid riding with anyone who is suspected of being under the influence of drugs and/or alcohol.
- **Driving experience** - Driving is not a quickly learned skill and requires focus and good judgment. Young drivers should be accompanied by an experienced adult and avoid complex driving situations until more practiced. The graduated drivers license system recommended by the Board does not confer full driving privileges until age 18, and after significant, supervised driving time.

## 2. Drowning

“Drowning, which can happen in as little as one inch of water, is usually quick and silent. A child will lose consciousness within two minutes after submersion, with irreversible brain damage occurring within four to six minutes.” (April 2004 National Safe Kids report). \_\_\_ Kansas children drowned in 2004. In \_\_\_ out of \_\_\_ cases, children 5 years and younger were unattended when they drowned.

A 2-year-old boy drowned in 11 inches of water when he wandered from the house and fell into a decorative water garden pond.

According to the Safe Kids report, drowning is the second-leading cause of injury-related death for children 14 years and younger, yet it was noted that many parents do not consider drowning a major hazard.

### Drowning Deaths by Age in 2004, N = 14



\_\_\_ children under age 5 who lost their lives to drowning in 2004 were either left unsupervised or were being supervised by a sibling under the age of 12. Children should not be left to supervise other children around bodies of water. Additional supervision should be assumed by responsible adults.

### Total Drowning Deaths by Age, 1994 to 2004, N = 14





## 2. Drowning

**Drowning Deaths by Gender 2004, N =**

**Total Drowning Deaths by Gender, 1994 to 2 004, N =**

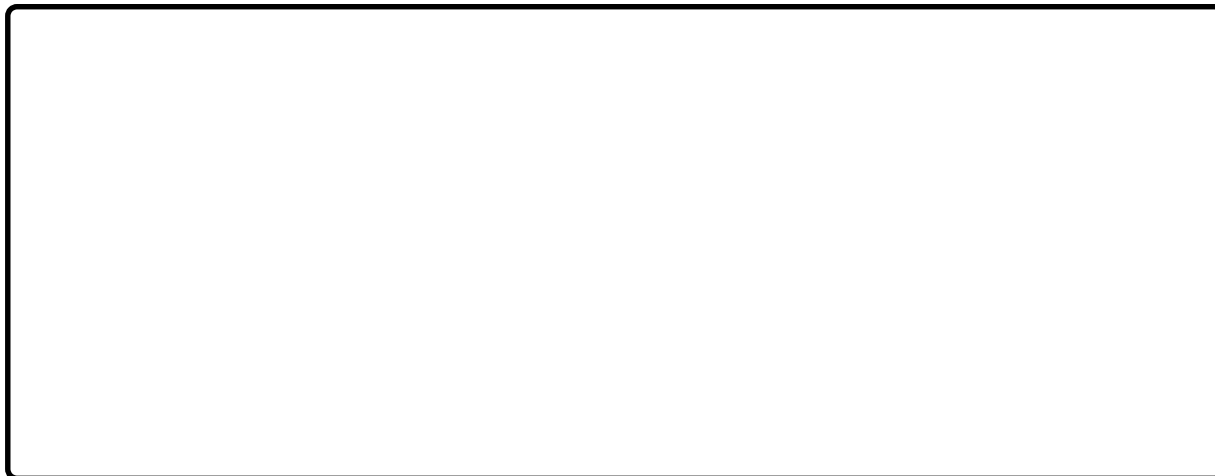
Most drownings occur when a child is left unsupervised. In 2004, \_\_% of the drowning deaths involved lack of supervision. The majority of the deaths occurred in \_\_\_\_.

**Drowning Deaths by Location in 2004, N = 14**

## 2. Drowning

While swimming, a 17-year-old male drowned when hypothermia set in from the cold lake temperature in early spring.

**Total Drowning Deaths by Location, 1994 to 2004, N =**



### PREVENTION POINTS

- **Proper Supervision** - There should always be an adult, who is capable of responding to an emergency, observing children around water. The adult should be actively watching and avoid distractions. Assigning swimming “buddies” is a good idea, especially if there are many swimmers. Supervision also applies to bathtubs, where children are often left alone for short periods of time.
- **Pool/Environment Safety** - Pools should have safety equipment available and be inaccessible to small children. Five foot fencing, with safety latched gates, completely encircling a pool or hot tub is recommended. Specifically related to bathtubs, seats designed to hold a baby’s head above water are no substitution for adult supervision. Also, there are cases where small children fall into buckets, toilets, washing machines or other such water holding basins and drown. Caregivers should be vigilant about less obvious dangers.
- **Use of Safety Equipment** - Children should wear Personal Flotation Devices (PFDs) when participating in water activities. “Water wings” and other inflatable items are not adequate substitutes.
- **Water Safety Education** - Children should have swimming lessons and water safety education. The American Academy of Pediatrics recommends waiting until 4-years-of-age to begin lessons. While this is vital, swimming ability alone does not relieve the need for adult supervision or PFDs.

# 3. Suffocation/Strangulation

There were \_\_ Suffocation/Strangulation deaths in 2004. Like many of the injury categories, lack of supervision is often a contributing factor in these deaths, and most could have been prevented.

A 1-year-old died as a result of strangulation when he was left unsupervised for over an hour while sitting in his carseat. The improperly buckled chest strap was found around his neck.

Generally, unintentional suffocation/strangulation deaths affect very young children. They have not yet developed the strength or motor skills to remove themselves from dangerous situations. However, there are occasions where older children are trapped. A lapse of supervision can lead to death.

A 3-year-old slipped out of the house unnoticed by his parents and was found hanging on a fence when he became entangled in the strap of his toy.

## Suffocation/Strangulation Deaths by Age in 2004, N =13



## Suffocation/Strangulation Deaths by Cause in 2004, N = 13



# 3. Suffocation/Strangulation

One of the most common and concerning causes of suffocation/strangulation is improper sleeping arrangements for infants. Reviews from Kansas and across the nation show that there are several common practices that increase the risk for asphyxial death. These include: sleeping somewhere other than a crib; being placed on the abdomen to sleep; sleeping in a cluttered area; being placed on soft surfaces such as pillows or quilts; and co-sleeping with parents or siblings.

A mother placed her 1-month-old infant on the couch to sleep. He was laying toward the back of the couch while the mother laid down on the edge to nap. Approximately 4 hours later, she awoke to find the infant's face pressed down in the cushion. The baby died of positional asphyxia.

The Board reviews multiple cases each year in which a parent places an infant to sleep in soft bedding or on soft pillows, only to find the infant face down in the bedding and not breathing. Infants should never be placed on surfaces which could impair the ability to have an unobstructed airway.

A mother placed her 4-month-old infant on a pillow as the child's stomach was upset. When she awoke she found the infant unresponsive.

A 2-month-old infant was placed in bed between her mother and the adjacent wall. 6 hours later, the infant was found face down in the covers and was not breathing.

## PREVENTION POINTS

- **Proper Supervision** - Young children should be watched with an attentive eye. Leaving them alone for extended periods of time, even 10 to 15 minutes, allows opportunities for accidents. Child-specific training in CPR and other emergency responses can help prevent death.
- **Safe Environments** - Be vigilant about potential dangers to children. Consideration must be given to their size, curiosity, and motor ability. Many things that are not threats to adults (e.g. chests or coolers with latches, hanging cords, and plastic bags) can be deadly to small children.
- **Infant Sleeping Arrangements** - The safest sleeping arrangement for an infant is in an approved crib, on his or her back. The mattress should be firm and fitted to the crib so that the child cannot be trapped between the mattress and side of the crib. Soft items such as blankets, pillows, and stuffed animals provide opportunities for asphyxia. Babies should not sleep in adult beds and should not be placed in bed with parents or siblings.

## 4. Fire

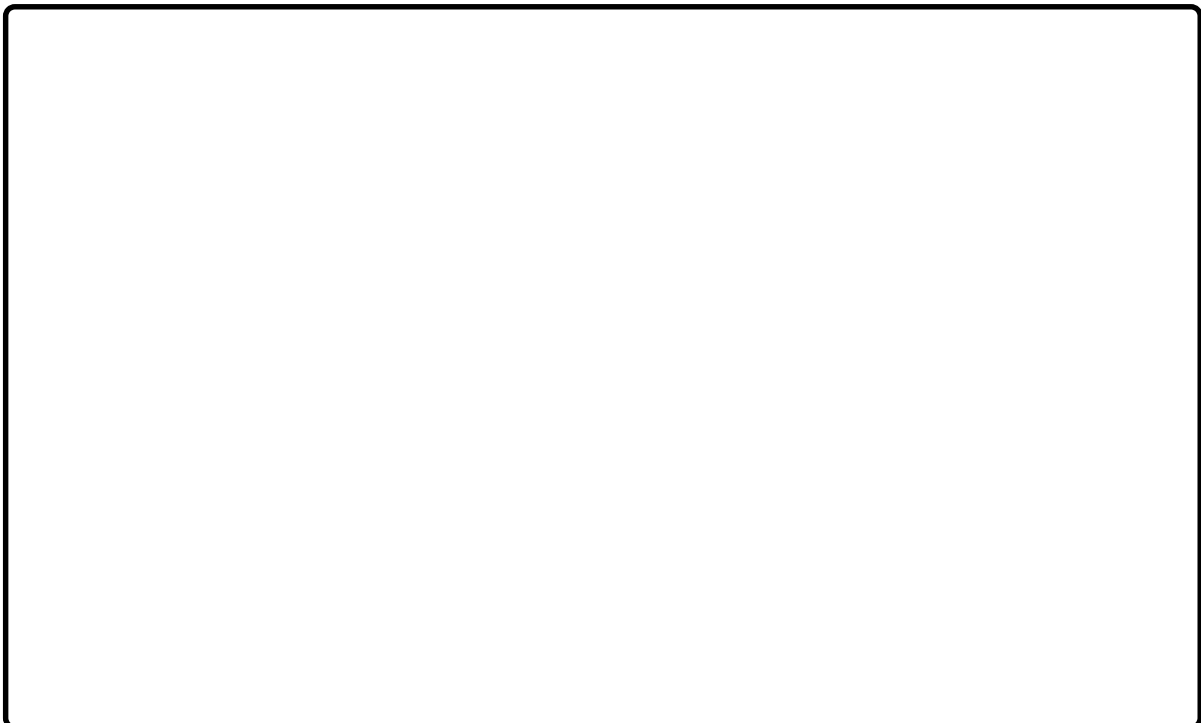
\_\_ Kansas children died in fires in 2004. Review showed all \_\_ fire deaths to be preventable. The \_\_ deaths were the result of \_\_ fires. \_\_ of the children were male and \_\_ were female. In \_\_ of the \_\_ incidents, smoke detectors were present but were not working. In the other \_\_ cases it was unknown if the detectors were functioning. All of the fires exhibited preventable risk factors.

A 13-year-old lost her life in a house fire. There were no working smoke detectors in the home.

In one of the other fires, children were unattended with access to candles and lighters. The child who started the fire had been caught playing with matches and/or lighters previously. In another fire, which started from an unattended candle left by an adult, a child was hiding from the fire and was overtaken by smoke and heat. \_\_ of the \_\_ fatal fires in 2004 were thought to have been started by children under the age of \_\_\_\_ who were playing with matches or lighters. Parents and caregivers should be diligent in keeping matches and/or lighters away from children and in teaching children how to escape in the event of a fire.

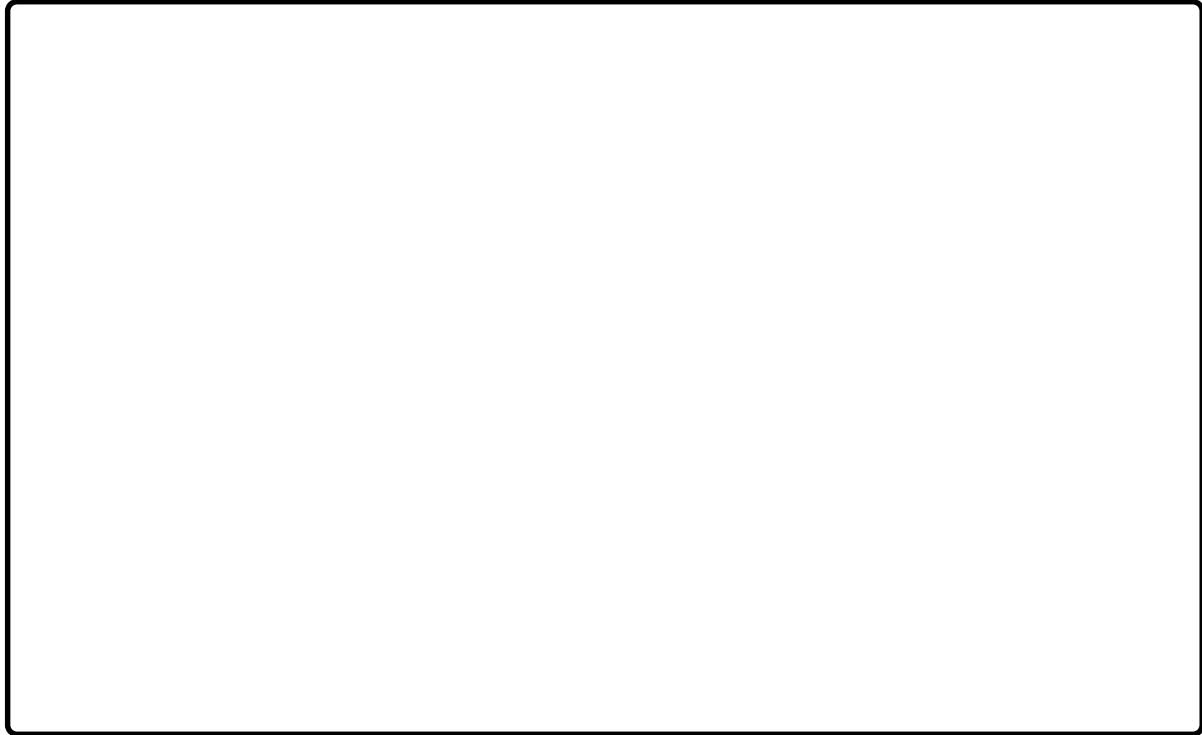
A 4-year-old was playing with matches when he set his bed on fire. His younger brother was the victim of the fire. It was unknown if there was a working smoke detector in the home.

**Fire Deaths by Age in 2004, N=**



## 4. Fire

Fire Deaths by Ignition Source in 2004, N=



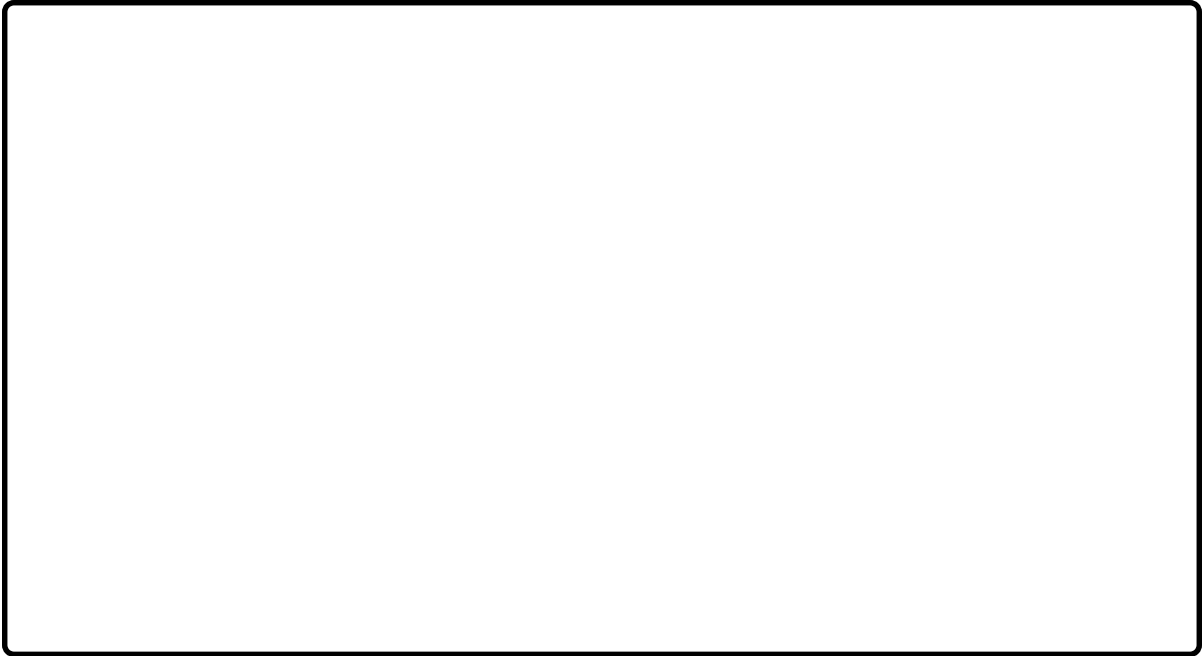
### PREVENTION POINTS

- **Proper Supervision** - Young children must be watched closely. Leaving them unsupervised, especially if there are objects like candles or matches within their reach, could result in a serious injury or death.
- **Prevent Access to Fire-starting Material** - Matches, lighters, candles, etc. should be kept away from children. *Do not assume a young child cannot operate a lighter or match.*
- **Working Smoke Detectors** - Smoke detectors should be placed in several locations throughout the house, and tested once a month to ensure they are working.
- **Emergency Fire Plan** - Everyone in the house, including the children, should know all exits from the house in case of a fire. Designate a central meeting location outside of the home and practice fire drills.

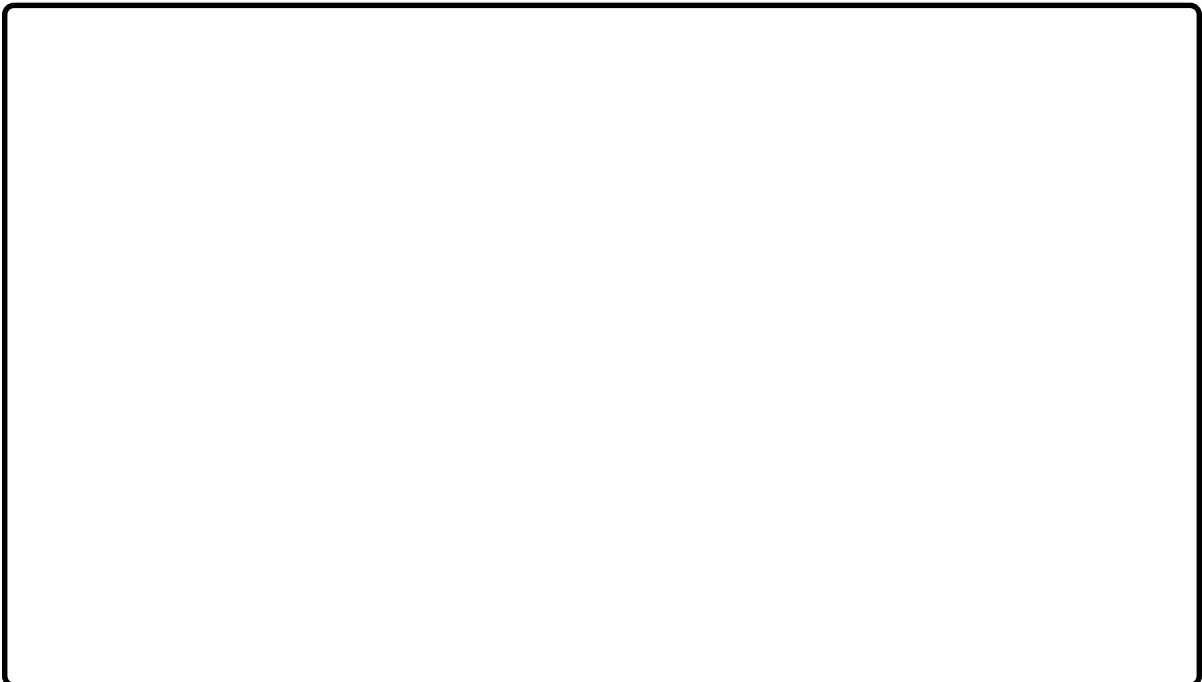
# C. Natural Death-Except SIDS

Natural deaths are the largest category of child deaths in Kansas. In 2004, they made up \_\_% of the total 492 cases. Unlike other categories, prevention efforts are harder to define. Natural deaths are prevalent in the first 29 days of life, correlating with prematurity and congenital disorders found during the neonatal period.

**Natural Deaths-Except SIDS by Age in 2004, N = 306**



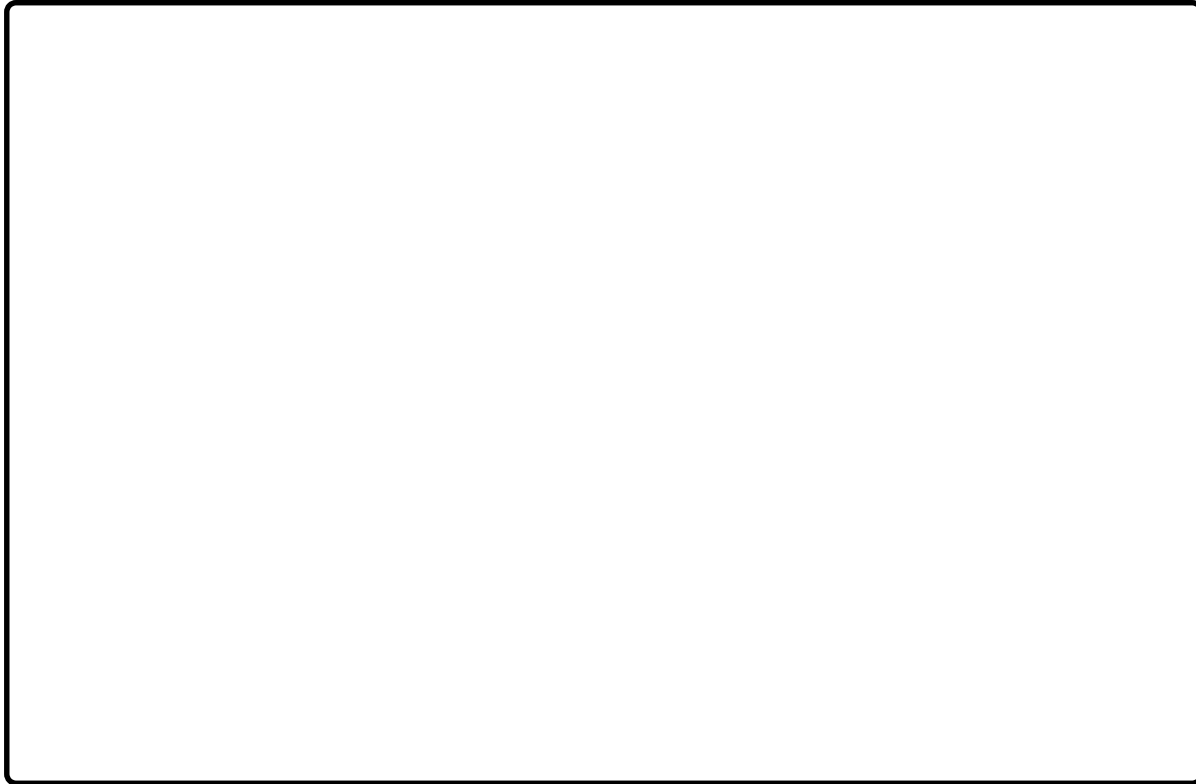
**Natural Deaths-Except SIDS by Cause in 2004, N = 306**



# C. Natural Death-Except SIDS

While the degree to which prematurity can be prevented is unknown, there are risk factors for prematurity and poor health that can be addressed. The graphs below indicate cases in which mothers used alcohol, illicit drugs, or cigarettes during their pregnancy. In \_\_\_\_ of the cases, the Board considered the mother's medical condition a factor in the child's death. In over \_\_\_\_ cases it was unknown if the mother used nicotine, drugs, or alcohol due to the lack of documentation or testing.

## Natural Deaths-Except SIDS by Risk Factor in 2004, N = 306



### PREVENTION POINTS

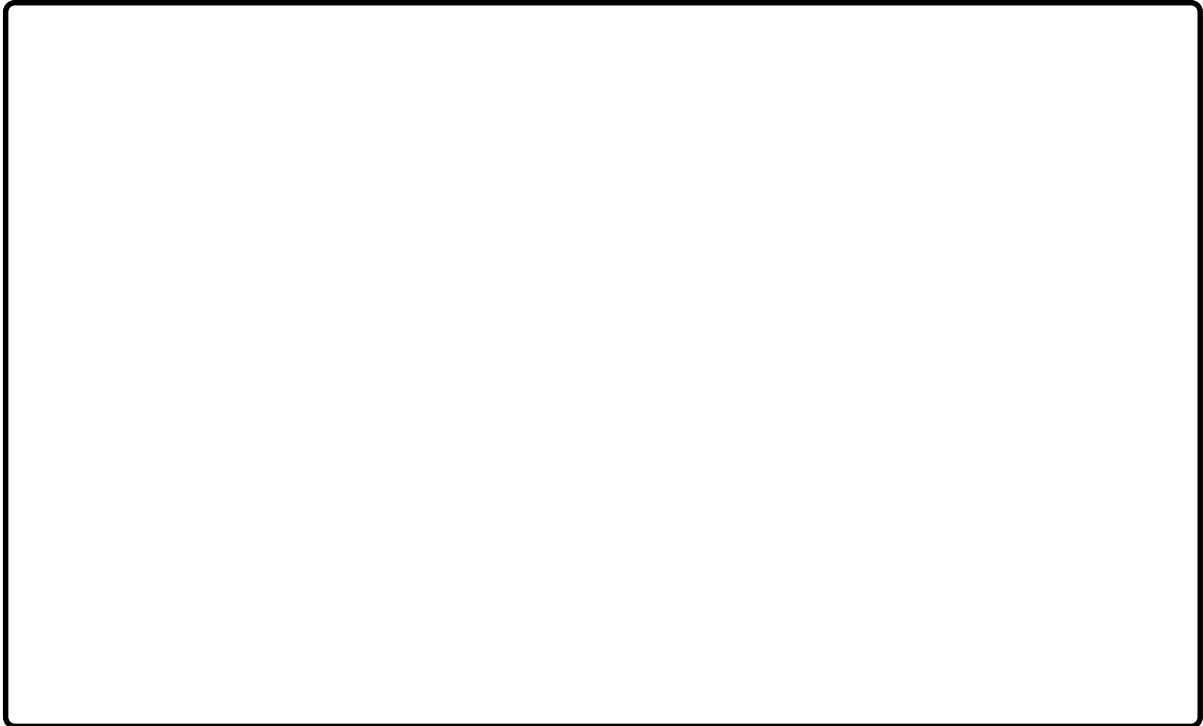
- **Prenatal Care** - Medical care during a pregnancy is invaluable. Risk factors and problems addressed early can be avoided or treated to minimize poor outcomes. Proper nutrition and rest is vital to a pregnancy. Iron and folic acid supplements, along with other physician prescribed regiments can help ensure a healthy pregnancy and newborn.
- **Avoid Drugs, Alcohol, and Nicotine** - The use of illicit substances, alcohol, and nicotine should be avoided while pregnant. These elements all have the ability to cause serious health issues and even death for newborns and infants.



## D. Natural - SIDS

Sudden Infant Death Syndrome (SIDS) is a very narrow classification of death specifically addressing infants who die unexpectedly in unwitnessed situations. Kansas coroners can only rule SIDS as the cause of death if the child is under 1-year-of-age, and an investigation and autopsy have revealed no known cause of death. Since the cause of SIDS is unknown, by definition these deaths would not be preventable. However, risk factors are known and are being mentioned in the data collection. The majority (\_\_\_%) of SIDS deaths in 2004 occurred in the first six months of life, which is consistent with national findings.

**Natural Deaths-SIDS by Age in Months in 2004, N =23**



**Natural Deaths-SIDS by Gender in 2004, N =23**



## D. Natural - SIDS

SIDS by definition has no known cause. There is, however, some correlation with certain risk factors. Although SIDS can occur when babies sleep on their backs, the American Academy of Pediatrics notes that the likelihood of SIDS is five times greater for children who are placed on their stomachs to sleep. High temperatures (overheating, over bundling), improper sleeping environment (co-sleeping, excess bedding and pillows, stuffed animals, etc.), and secondhand smoke can also increase the risk of SIDS. Other risk factors include low birth weight, prematurity, maternal smoking during pregnancy, multiple births (twins, etc.), young maternal age, and births less than 18 months apart.

### Natural Deaths-SIDS by Baby's Position in 2004, N = 23



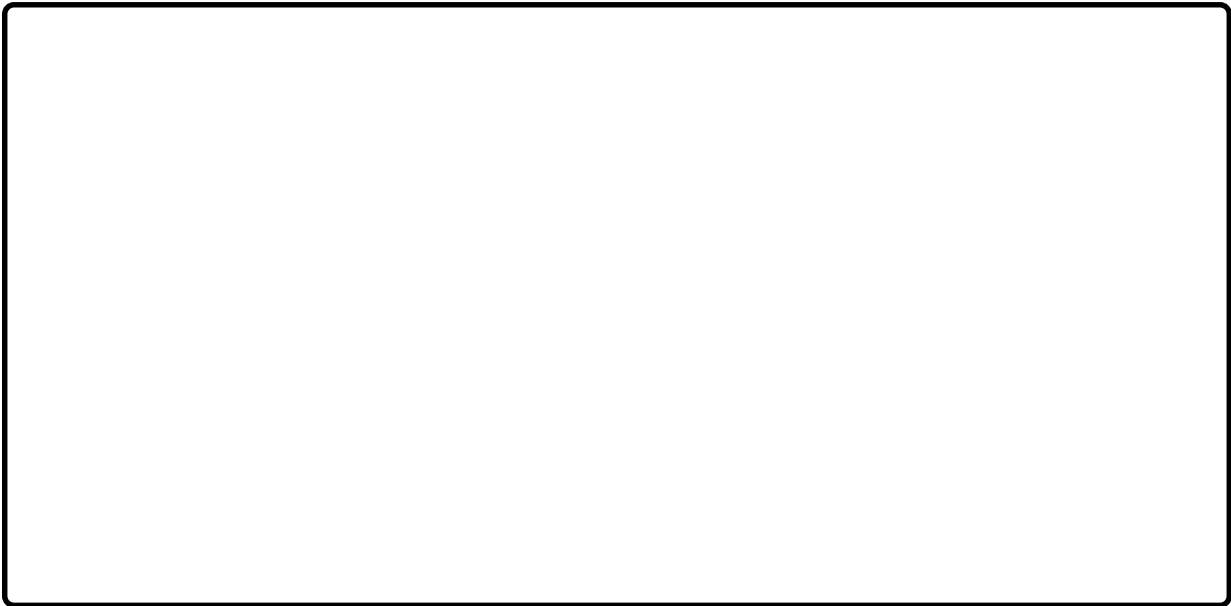
Placing babies to sleep on firm surfaces, in approved cribs, reduces both the risk of SIDS and of unintentional suffocation.

### Natural Deaths-SIDS by Sleeping Surface in 2004, N = 23



# D. Natural - SIDS

Natural Deaths-SIDS by Sleep Location in 2004, N = 23



## PREVENTION POINTS

- Infants should be placed to sleep in a supine position (on the back). Side sleeping is not as safe as supine sleeping, and is not advised.
- A firm sleep surface should be used. Soft materials such as pillows, quilts, comforters, or sheepskins should not be placed with the infant.
- Use sleep clothing, such as sleeping sacks designed to keep the infant warm instead of bedding, which could overheat the infant or cover the baby's head. Also, avoid overheating the infant's room.
- Smoking during pregnancy is a major risk factor and should be avoided.
- A separate, but proximate sleeping environment is recommended. Bed sharing with adults or other siblings should be avoided.
- Pacifier use during sleep reduces the risk of SIDS, but should not be forced upon an infant or reinserted once the infant falls asleep.
- Devices marketed at reducing SIDS have not been proven to reduce the incidence of SIDS. Obtain an evaluation/recommendation from a medical professional before use of such products.

# E. Undetermined

There were \_\_ Undetermined deaths in 2004. These deaths cover a broad spectrum of investigative thoroughness. In some cases, every effort was made to determine why a death occurred, but there was simply no way to be sure what actually happened. Other cases revealed incomplete investigations or law enforcement agencies not being informed of the death. In some instances, autopsies were not performed or were incomplete, or toxicology reports on the victim were not requested.

A 1-month-old found unresponsive at home by her parents, was transported by personal vehicle to the hospital. An investigation into the circumstances surrounding the death was not conducted by law enforcement, as the infant had been removed from the home and died at the hospital. Neither the hospital, nor the coroner notified law enforcement of the death.

Periodically, the Board encounters cases where an investigation was conducted, but certain questions remain as to what could have contributed to the child's death. Examples include: the mother taking medication while breast feeding, a child not being properly supervised, illicit drugs in the environment, or concerns about the social history. If there are multiple circumstances that could have contributed to the child's death and no identifiable cause is discovered, the Board may classify the death as Undetermined.

A 6-day-old infant died in the home of a young mother who was a heavy cigarette smoker, on painkillers, and was in possession of marijuana. The autopsy revealed no discernible cause for the infant's death. The manner of death was classified as Undetermined.

This issue is important enough that the SCDRB has once again included in its policy recommendations a call for thorough investigations.

## PREVENTION POINTS

- **Thorough Investigations** - All non-natural child deaths should be exhaustively investigated. The circumstances and family situation should not affect the detail of the inquiry. Hospitals should have protocols in place to ensure law enforcement is notified when a child dies from other than expected natural causes.
- **Complete Autopsies** - Combined with excellent law enforcement investigations, complete autopsies often provide a better understanding of child deaths. However, there are situations in which an autopsy should have been performed and was not, or the autopsy did not include all aspects of a standard forensic investigation such as full-body x-rays, cultures, and metabolic/toxicologic studies. Coroners need to be mindful of their statutory duties and should be aware of the reimbursement program through the Kansas Department of Health & Environment. Visit the SCDRB's website at <http://www.ksag.org/Divisions/SCDRB> for further information.

# IV. Public Policy Recommendations

The Child Death Review Board provides policy recommendations in areas that could significantly affect child deaths in Kansas. The information gathered and analyzed by the Board provides compelling support for the recommendations made below.

Between 1994 and 2004, \_\_ Kansas children under the age of 18 died in motor vehicle crashes. That is more than one death a week. In \_\_ of the incidents, **appropriate restraints were not used** by the child that died.

Although proper restrains cannot prevent all deaths; \_\_% of the MVC deaths were deemed preventable if the child had been restrained.

## ENHANCE MOTOR VEHICLE RESTRAINT LAWS

The chief policy recommendation of the Board is to create more effective laws for safety restraint use in vehicles. Motor vehicle crash incidents take the lives of many Kansas children every year. Above all other areas, motor vehicle deaths are consistently shown to be preventable. A significant portion of that preventability comes with the proper use of safety restraints. **In 2004, the National Highway Traffic Safety Administration estimated total (adult and child) seatbelt use in Kansas at 68%, which ranked Kansas as 43rd in the Nation for seatbelt use.** Kansas law currently requires front passenger occupants and those under age 14, regardless of their seating position, to use a safety restraint while traveling in a vehicle. Since its inception, the State Child Death Review Board has consistently found a lack of safety restraint use in the majority of vehicular deaths, but specifically with 15 through 17-year-olds. In addition, the Board is reviewing cases that involve occupants who were ejected from the backseat of the vehicle. Unlike some of the causes the Board sees in its review process, there is a simple, effective way to decrease motor vehicle deaths especially in this age group. An expansion should be implemented to the current law for a standard seatbelt law, in which all occupants are required to use a safety restraint device regardless of their seating position in the vehicle.

- **Passage of legislation requiring use of safety restraint device for all occupants be restrained regardless of seating position.**

## INCREASE FINES FOR NON-COMPLIANCE WITH SAFETY RESTRAINT LAWS

In addition to enacting a standard seatbelt law, the Board earnestly supports an increase in fines for violators of the law. Strong enforcement of the safety restraint laws is also recommended.

- **Increase the fines for noncompliance with safety restraint laws to a level that effectively promotes proper use of safety restraints.**
  - Current law requires a one-time fine of \$10 to \$20 for violation of the seatbelt law, in spite of the number of non-restrained persons. The Board recommends the fine be raised to closer match the \$60 fine for Booster Seat Law violations; and a separate violation be allowed for every occupant not in compliance.
- **Rigorous enforcement of the seatbelt law.**
  - The Board would like to see law enforcement officials and the judicial system be more diligent and consistent in their enforcement of the seatbelt law.

# IV. Public Policy Recommendations

## INSTITUTE GRADUATED DRIVERS LICENSE LAW

Graduated licensing laws allow adolescents to become more proficient and experienced in their driving before having full driving privileges. A U.S. Department of Transportation report lists 38 states that have instituted a graduated licensing system. Kansas is not among them.<sup>4</sup> Currently, at age 16, one may simply take a test to acquire a driving license if an affidavit is provided showing at least 50 hours of adult supervised driving. One test does not compare to the amount of education one receives in a driver's education course. A standardized course with state-certified instructors, documented driving time, and a graduated licensing system, would greatly reduce the risk of motor vehicle crash. An effective graduated licensing system would encompass the following:

To receive a Level One Limited Learner permit a person must be at least 15-years-old, complete an approved driver education course, and pass a written exam and vision test.

- Provisions/Restrictions for Level One Limited Learner permit holders
  - All occupants must be properly restrained
  - Only driver and supervising adult allowed in front seat
  - Driving hours are restricted from 5 am to 9 pm with supervising adult for first 6 months
  - The driver may not operate any wireless devices

To receive a Level Two Limited Provisional License a person must be at least 16 years old, have had a Level One permit for 12 months, and have had no moving violations, seat belt infractions, improper wireless use infractions, or Minor In Possession (MIP) violations within the preceding 6 months.

- Provisions/Restrictions for Level Two Limited Provisional License holders
  - All occupants must be properly restrained
  - Supervising adult must be seated beside driver
  - The driver may not operate any wireless devices
  - Driver may drive without supervision between 5 am and 9 pm, and anytime when driving directly to or from work
  - When driving without a supervisor, no more than 1 passenger under 21-years-of-age unless they are members of the immediate family
  - When driving without a supervisor, no other passengers under 21-years-of-age are allowed if a family member under 21-years-of-age is a passenger

To be issued a Level Three Full Provisional License a person must have had a Level Two Limited Learner License for at least 6 months with no convictions of moving violations, seat belt infractions, improper wireless use, or MIP violations within the preceding 6 months.

- Provisions/Restrictions for Level Three Full Provisional License holders
  - All occupants must be properly restrained

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*The State Child Death Review Board would like to express its gratitude to the Legislators who supported efforts to increase the safety of Kansas children during the 2005 Session. House Bill 2611 was introduced and passed. This act implemented the Board's first recommendation to increase the effectiveness of Kansas child safety restraint laws.*

# IV. Public Policy Recommendations

## COMPREHENSIVE AND THOROUGH INVESTIGATION OF CHILD DEATHS

According to Dr. Erik Mitchell, District Coroner and Board member, “Thorough investigation of child deaths is a mandate of the State Child Death Review Board. Such an investigation should include more than the cause of death and manner of death. An understanding of the mechanisms of death is of critical importance if we are to develop strategies for the prevention of future deaths. For example, in a single car crash the investigation should include sufficient examination of the vehicle and environment to exclude or to describe mechanical and physical factors that caused or increased the probability of the crash. Also, the examination should include investigation of potential medical factors- toxicology and previously undiagnosed physical infirmities or illnesses- that could play a role in causing the crash. While a single car crash looks deceptively simple on superficial examination, there can be factors that affect the crash, or the outcome of injuries, where only a detailed examination of the event and of the decedent will permit a complete understanding of how and why this death occurred.”

“The State Child Death Review Board has long recognized the limitations of resources that inhibit the extent of death investigations. Consequently, in 2002, the SCDRB sought and obtained a change in statute. Counties can now obtain a refund of reasonable expenses for child autopsies from the District Coroner Fund in cases that fall under guidelines set by the SCDRB. In other words, if an autopsy is performed for a child where there is reason to believe that unnatural mechanisms are at play (accident, suicide, homicide) the County can request and receive reimbursement for reasonable autopsy costs from the District Coroner’s Fund. It is hoped that the availability of funds will encourage the inclusion of autopsies in all potentially unnatural child deaths.”

The State Child Death Review Board would be incapable of performing its function without the dedicated efforts of law enforcement officers and county and district coroners. While the investigation of child deaths is a difficult task, only thorough examinations of these incidents allow the Board to gather accurate information. Without that foundation, the Board cannot make recommendations for ways to prevent the deaths of Kansas children.

## SCDRB SERVES AS A CITIZEN REVIEW PANEL

The Kansas Child Death Review Board also serves in the capacity as one of three States Citizen Review Panels. Each state is required by the Federal Child Abuse Prevention and Treatment Act (CAPTA) to establish citizen review panels in order to receive federal funding for child abuse prevention services. The purpose of the citizen review panels is to determine whether state and local agencies are effectively discharging their child protection responsibilities. Citizen review panels are required by CAPTA to do the following:

- Measure agency performance by determining whether the State agency complies with the state CAPTA plan, including the states assurances of compliance with federal requirements contained in the plan;
- Determine the extent of the agencies coordination with the Title IV-E foster care and adoption systems and the review process for child fatalities and near fatalities;
- Prepare and make available to the public an annual report summarizing the panels activities;
- Review policies and procedures of State and local agencies to evaluate the extent to which the agencies are effectively discharging their child protection responsibilities;
- Provide for public outreach and comments in order to assess the impact of current policies, procedures, and practices upon children and families in the community;
- Provide recommendations to the State and public on improving the child protective services system at the State and local levels.

# V. Appendix

## METHODOLOGY

### Kansas Child Death Review Board 2004 Data

Each month, the KDHE Vital Statistics Office provides the SCDRB with a listing of children whose deaths have been reported in Kansas for the previous month. The SCDRB reviews the deaths of all children (birth through 17-years-of-age) who are residents of Kansas and die in Kansas, children who are residents of Kansas and die in another state, and nonresident children who die in Kansas. Attached to the listing is a death certificate for each child and a birth certificate, if available.

The SCDRB's executive director must receive a Coroner Report Form before a case can be opened for investigation. The death certificate and coroner's report contain the information necessary to begin a case review. Receipt of these documents ensures that each child death in Kansas is being reviewed.

Once a case is opened, the death and birth certificates, the coroner's report, and the report of death are assessed to identify additional information necessary for a comprehensive review. Any additional information that is needed is then requested from the appropriate agency. Additional information may consist of autopsy reports, law enforcement reports, medical records, SRS records, and records from the State Fire Marshal. In some cases, it is necessary to obtain mental health, school, and other protected records. All information obtained by the SCDRB is confidential.

After all records have been collected, cases are assigned to board members for initial review and assessment. Each member reviews his or her assigned cases and enters case information into an on-line database. The on-line database provides a relatively easy way to maintain information. However, transfers of information between outdated software to the new system in 2000 have created the possibility for slight numbers adjustments when reviewing data from past years.

During the SCDRB's monthly meetings, members present their cases orally, and circumstances leading to the deaths are discussed. If additional records are needed, or specific questions are raised, a case may be continued to the next meeting. Otherwise, upon full agreement of the cause and manner of death, cases are closed. In some instances the SCDRB may determine that it is appropriate to refer a case back to the county or district attorney in the county where the death occurred. This would include recommendations for follow-up investigation.

Any questions about this report or about the work of the SCDRB should be directed to Angela Nordhus, Executive Director, at (785) 296-7970.

### Endnotes

<sup>1</sup> "CLOSING THE GAP between current science and public policy." CPS Issue Report. 13 July 2004 <[http://www.chop.edu/traumalink/download/2004/pcps\\_cpsreport.pdf](http://www.chop.edu/traumalink/download/2004/pcps_cpsreport.pdf)>.

<sup>2</sup> "Booster Seats: Easy to Use and Effective" CPS Issue Report. 13 July 2004 <[http://www.chop.edu/traumalink/download/2004/pcps\\_cpsreport.pdf](http://www.chop.edu/traumalink/download/2004/pcps_cpsreport.pdf)>.

<sup>3</sup> Child Passenger Safety: Fact Sheet. CDC. <<http://www.cdc.gov/ncipc/factsheets/childpas.htm>>.

<sup>4</sup> United States. National Highway Traffic Safety Administration. Traffic Safety Facts. Apr. 2004.

<sup>5</sup> Ibid



# V. Appendix

## GOALS & HISTORY

The SCDRB has developed the following three goals to direct its work:

- 1) To describe trends and patterns of child deaths (birth through 17 years of age) in Kansas and to identify risk factors in the population.
- 2) To improve sources of data and communication among agencies so that recommendations can be made regarding recording of the actual cause of death, investigation of suspicious deaths, and system responses to child deaths. This interagency communication should occur at the individual case level and at the local and state levels.
- 3) To develop prevention strategies including community education and mobilization, professional training, and needed changes in legislation, public policy, and/or agency practices.

The SCDRB was created by the 1992 Kansas Legislature and is administered by the Office of the Kansas Attorney General. SCDRB membership is appointed according to K.S.A. 22a-241 et. seq. Membership includes: one member each from the Office of the Attorney General, the Kansas Bureau of Investigation (KBI), the Department of Social and Rehabilitation Services (SRS), the Kansas Department of Health and Environment (KDHE), and the Department of Education; three members appointed by the Board of Healing Arts: a district coroner, a pathologist, and a pediatrician; one representative of a child advocacy group appointed by the Attorney General; and one county or district attorney appointed by the Kansas County and District Attorneys Association. No term limit is set on appointments. In 1994, the Legislature amended the statute to enable the SCDRB to appoint an executive director.

This multi-agency, multi-disciplinary volunteer board meets monthly, with no travel or expense reimbursement, to examine circumstances surrounding the deaths of Kansas children (birth through 17-years-of-age). Members bring a wide variety of experience and perspective on children's health, safety, and maltreatment issues. Because of this combination of expertise, the effectiveness of intervention and prevention is greatly increased.

With assistance from law enforcement agencies, county and district attorneys, SRS, KDHE, physicians, coroners, and other medical professionals, the SCDRB is given the comprehensive information needed to thoroughly examine circumstances which lead to the deaths of children. By understanding how children are dying, the SCDRB is able to propose ways of reducing the number of preventable deaths.

When the SCDRB began its work, data was compiled on a fiscal year (July 1993 - June 1994) basis. In 1997 the SCDRB changed its review to a calendar year format, beginning with the 1995 study year, to bring its data into conformity with fatality review boards in other states so that future trends and patterns can be compared.

# V. Appendix

## Child Deaths By County of Residence, 2003

County	Total Population	Total Deaths	Natural-Except SIDS	Unintentional Injury-MVA	Unintentional Injury	Natural-SIDS	Undetermined	Homicide	Suicide
Allen	3,427	1	1						
Anderson	2,058	2	2						
Atchison	4,216	1			1				
Barber	1,151	0							
Barton	6,929	9	5		2		1	1	
Bourbon	3,668	2	2						
Brown	2,635	1	1						
Butler	16,364	11	3	3	2	2	1		
Chase	645	0							
Chautauqua	912	1			1				
Cherokee	5,496	6	4	1				1	
Cheyenne	702	0							
Clark	568	0							
Clay	2,032	6	1		4	1			
Cloud	2,099	2	1			1			
Coffey	2,251	2	2						
Comanche	453	0							
Cowley	9,109	4	4						
Crawford	8,548	8	6	1					1
Decatur	739	0							
Dickinson	4,660	0							
Doniphan	1,956	0							
Douglas	20,437	14	9	2	1		1		1
Edwards	795	2	1	1					
Elk	664	0							
Ellis	5,730	0							
Ellsworth	1,243	2	1	1					
Finney	13,309	15	8	4	1	1	1		
Ford	9,903	9	7	1			1		
Franklin	6,728	4	1	3					
Geary	7,900	9	8		1				
Gove	747	2	1		1				
Graham	568	1						1	
Grant	2,441	1	1						
Gray	1,773	0							
Greeley	376	0							
Greenwood	1,720	4	2	2					
Hamilton	721	1						1	
Harper	1,455	0							
Harvey	8,338	7	4	3					
Haskell	1,331	1	1						
Hodgeman	553	0							
Jackson	3,372	10	8	2					
Jefferson	4,768	4		2			1		1
Jewell	689	0							
Johnson	124,728	49	37	2	4	2		2	2

# V. Appendix

## Child Deaths by County of Residence, Continued

County	Total Population	Total Deaths	Natural-Except SIDS	Unintentional Injury-MVA	Unintentional Injury	Natural-SIDS	Undetermined	Homicide	Suicide
Kearny	1,455	1	1						
Kingman	2,210	1			1				
Kiowa	693	1	1						
Labette	5,465	5	2			1	1		1
Lane	467	1		1					
Leavenworth	17,994	10	9			1			
Lincoln	763	0							
Linn	2,306	2		1	1				
Logan	736	0							
Lyon	8,934	7	4	2	1				
Marion	3,110	1		1					
Marshall	2,414	0							
McPherson	6,982	7	2	5					
Meade	1,295	4	1	3					
Miami	7,647	4	1	1		1	1		
Mitchell	1,533	0							
Montgomery	8,582	11	5	1	2	2		1	
Morris	1,436	1	1						
Morton	938	1	1						
Nemaha	2,831	1		1					
Neosho	4,051	1		1					
Ness	702	1		1					
Norton	1,270	1	1						
Osage	4,282	2	1	1					
Osborne	937	0							
Ottawa	1,530	1		1					
Pawnee	1,641	1	1						
Phillips	1,420	0							
Pottawatomie	5,189	2	2						
Pratt	2,153	4	3			1			
Rawlins	610	0							
Reno	14,924	9	3	2	3	1			
Republic	1,157	0							
Rice	2,421	0							
Riley	11,574	9	6	1	1	1			
Rooks	1,243	1	1						
Rush	755	0							
Russell	1,459	0							
Saline	13,737	5	3	1		1			
Scott	1,245	0							
Sedgwick	127,989	95	69	6	10	3	4	1	2
Seward	7,254	4	2		2				
Shawnee	42,374	34	19	3	4	3	2	2	1
Sheridan	639	0							

# V. Appendix

## Child Deaths by County of Residence, Continued

County	Total Population	Total Deaths	Natural-Except SIDS	Unintentional Injury-MVA	Unintentional Injury	Natural-SIDS	Undetermined	Homicide	Suicide
Sherman	1,500	0							
Smith	867	2		2					
Stafford	1,147	0							
Stanton	689	2	1						1
Stevens	1,541	1	1						
Sumner	6,916	1		1					
Thomas	1,994	2	1		1				
Trego	700	0							
Wabaunsee	1,649	0							
Wallace	436	0							
Washington	1,409	2		2					
Wichita	659	1	1						
Wilson	2,489	5	4					1	
Woodson	713	1	0						1
Wyandotte	44,556	48	34	2	6	1	2	3	
<b>Total</b>	<b>696,519</b>	<b>484</b>	<b>302</b>	<b>68</b>	<b>50</b>	<b>23</b>	<b>16</b>	<b>14</b>	<b>11</b>
<i>Out of State</i>		<i>10</i>	<i>4</i>	<i>4</i>	<i>2</i>				
<b>Total</b>		<b>494</b>	<b>306</b>	<b>72</b>	<b>52</b>	<b>23</b>	<b>16</b>	<b>14</b>	<b>11</b>

### County Population Source:

National Center for Health Statistics. Estimates of the July 1, 2000 -- July 1, 2002, United States resident population from the Vintage 2002 post census series by year, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. Available on the Internet at: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. 2003.

# V. Appendix

## SOURCES

Safety Belt Use in 2003. Sept. 2003. National Highway Traffic Safety Administration.

<<http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2003/SafetyBelt2003.pdf>>.

Safety Belt Use in 2002 – Use Rates in the States and Territories. May 2003. National Highway Traffic Safety Administration.

<<http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2003/809-587.pdf>>.

Child Restraint Use in 2002. Feb. 2003. National Highway Traffic Safety Administration.

<<http://www.nhtsa.dot.gov/CPS/ChildRestraints/ChildRestraintPPT.pdf>>.

“CLOSING THE GAP between current science and public policy.” CPS Issue Report. July 2004 <[http://www.chop.edu/traumalink/download/2004/pcps\\_cpsreport.pdf](http://www.chop.edu/traumalink/download/2004/pcps_cpsreport.pdf)>.

“Booster Seats: Easy to Use and Effective” CPS Issue Report. July 2004 <[http://www.chop.edu/traumalink/download/2004/pcps\\_cpsreport.pdf](http://www.chop.edu/traumalink/download/2004/pcps_cpsreport.pdf)>.

Child Passenger Safety: Fact Sheet. CDC.

<<http://www.cdc.gov/ncipc/factsheets/childpas.htm>>.

Traffic Safety Facts. Apr. 2004. National Highway Traffic Safety Administration.

National Center for Injury Prevention and Control. CDC.

<<http://www.cdc.gov/ncipc/>>.

“Reducing the Risks of SIDS in Child Care.” American Academy of Pediatrics, Presentation, Copyright 2004.

Methods of Suicide Among Persons Aged 10--19 Years --- United States, 1992--2001. June 2004. CDC.

<<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5322a2.htm>>.

“SIDS Prevention Points.” American Academy of Pediatrics Policy Statement, Nov. 2005